



City of Austin - JOB DESCRIPTION



AWU SCADA Specialist

FLSA:	Standard/Non-Exempt	EEO Category:	(30) Technicians
Class Code:	10857	Salary Grade:	LG7
Approved:		Last Revised:	December 17, 2009

Purpose:

Under general supervision, perform a variety of moderately complex engineering and technical tasks in support of the Austin Water Utility (AWU) Supervisory Control & Data Acquisition (SCADA) and Electronic Security Systems (ESS). Exercises judgment within defined methods, procedures, and practices.

Duties, Functions and Responsibilities:

Essential duties and functions, pursuant to the Americans with Disabilities Act, may include the following. Other related duties may be assigned.

1. Supports SCADA and ESS operations and system integrity and ensures the highest operational reliability and system availability on a 24hour/7days a week basis.
2. Installs, enhances, troubleshoots, calibrates and repairs systems and/or equipment that is part of the Austin Water Utility's Supervisory Control and Data Acquisition (SCADA) systems and Electronic Security Systems (ESS).
3. Installs and maintains computer and network equipment related to the remote administration of the SCADA and ESS systems.
4. Assists with engineering design, technical review and installations of the Utility's CIP projects related to SCADA and ESS systems.
5. Uses various instrumentation and network troubleshooting tools including; multi meter, OTDR, network cable tester, spectrum analyzer, watt meter, etc.
6. Installs and terminates optical fiber, twisted pair, multi-pair, coaxial cable, etc.
7. Performs loop checks, point-to-point checks, control loop analysis and hardware/software diagnostics of SCADA and ESS systems and equipment.
8. Answers customer questions and provide assistance as needed.
9. Conducts field inspections and maintenance to ensure safety and integrity of equipment.

Responsibilities - Supervisor and/or Leadership Exercised:

None.

Knowledge, Skills, and Abilities:

Must possess required knowledge, skills, abilities and experience and be able to explain and demonstrate, with or without reasonable accommodations, that the essential functions of the job can be performed.

Knowledge of installing and maintaining process control and electronic security systems and equipment including; PLC's, RTU's, hubs, switches, and routers.

Knowledge with configuring and troubleshooting process control instrumentation Knowledge with installing and maintaining Servers and Workstations.

Knowledge and experience in configuring and maintaining Human Machine Interfaces (HMI) for water and wastewater process control systems such as Intellution's iFIX and Telvent's OaSys.

Knowledge and experience programming PLC's and RTU's using IEC programming languages such as; ladder logic, define function block, sequential flow chart, etc.

Knowledge installing and maintaining RS232/RS485 and Ethernet networks.

Knowledge with communications protocols such as Modbus and TCP/IP. Knowledge of IEEE, ISA and TIA Standards applicable to process control and SCADA networks used in the Water Industry

Skill with PC running Windows and Unix.

Skill in mentoring daily work activities of others

Skill with programming and configuration of intelligent electronic devices (IED's), programmable logic controllers (PLC) and remote terminal units (RTU) using ladder logic and IEC Programming Languages.

Ability to install and maintain fiber optic cable, twisted pair cable, multi-pair cable and coax cable technologies.

Minimum Qualifications:

Graduation from an accredited four-year college or university with major course work in a field related to the installation and maintenance of process control systems, electronic security systems, network communications or computer and peripheral equipment.

Experience may substitute for education up to four (4) years

Licenses and Certifications Required:

Valid driver's license

This description is intended to indicate the kinds of tasks and levels of work difficulty required of the position given this title and shall not be construed as declaring what the specific duties and responsibilities of any particular position shall be. It is not intended to limit or in any way modify the right of management to assign, direct and control the work of employees under supervision. The listing of duties and responsibilities shall not be held to exclude other duties not mentioned that are of similar kind or level of difficulty.